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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/087,906 | 03/05/2002 | Wolfgang Eberle | 566/39038 | 6665 |
| 7590 | 06/24/2004 | | EXAMINER | |
| Barnes & Thornburg Ste. 900 750 17th Street N.W. Washington, DC 20006 | | | KRAMER, DEVON C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3683 | |

DATE MAILED: 06/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/087,906 | EBERLE ET AL. |
| Examiner | Art Unit | |
| Devon C Kramer | 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 February 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-16 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/6/04 has been entered.

Claim Rejections - 35 USC § 102

2) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in–
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3) Claims 1-2, 9-10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Murayoma (JP 9193777).

In reference to claim 1, Murayoma provides a vehicle brake system comprising: at least two wheel speed sensors (1-4) for single common speed of each wheel group

whose speed is to be measured; an electronic unit (10) for analyzing signals from the wheel sensors to instantaneously select the signals from one of the wheel sensors and determining a reference speed approximating the actual vehicle speed using the selected signals; and the electronic unit selecting the one wheel sensor as a function of the actual driving condition and at least one defined speed criterion (solution section). Please note that a wheel group can be all four wheels or the wheels on the front or rear of the vehicle.

In reference to claim 2, Murayoma provides brake system wherein there are only two wheel sensors provided for each wheel group whose speed is to be measured.

In reference to claim 9, Murayoma provides a brake system wherein the electronic unit is an ABS/ASR control unit.

In reference to claim 10, Murayoma provides a brake system wherein for an ABS control intervention of the brake pressure control of a wheel or of a wheel group, a higher speed of the speeds supplied by the at least two assigned wheel sensors is used as a basis when a protection against an erroneous reduction of the brake force has the highest priority.

In reference to claim 13, Murayoma provides a brake system wherein for an ASR control intervention of the brake pressure control of a wheel or of a wheel group, a higher speed of the speeds supplied by the at least two assigned wheel sensors is used as a basis when a protection against a spinning of a wheel or of the wheel group has the highest priority.

4) Claims 1, 3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshino (5015042).

In reference to claim 1, Yoshino provides a vehicle brake system comprising: at least two wheel speed sensors (1a, 1b, 1c, 1d) for each wheel group whose speed is to be measured; an electronic unit (3) for analyzing signals from the wheel sensors to instantaneously select the signals from one of the wheel sensors and determining a reference speed approximating the actual vehicle speed (4) using the selected signals; and the electronic unit selecting the one wheel sensor as a function of the actual driving condition and at least one defined speed criterion. Please note that a wheel group can be all four wheels or the wheels on the front or rear of the vehicle.

In reference to claim 3, Yoshino provides a system wherein for a braked vehicle, the wheel sensor which indicates the second-highest wheel speed is selected. (Col 1 lines 50-55)

In reference to claim 9, Yoshino provides a brake system wherein the electronic unit is an ABS/ASR control unit.

5) Claims 1, 4, 5-9, 11-13, 15-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohtsu (6246946).

In reference to claim 1, Ohtsu provides a vehicle brake system comprising: at least two wheel speed sensors (13) for each wheel group whose speed is to be measured; an electronic unit (10) for analyzing signals from the wheel sensors to instantaneously select the signals from one of the wheel sensors and determining a

reference speed approximating the actual vehicle speed using the selected signals; and the electronic unit selecting the one wheel sensor as a function of the actual driving condition and at least one defined speed criterion. Please note that a wheel group can be all four wheels or the wheels on the front or rear of the vehicle.

In reference to claim 4, Ohtsu provides a brake system wherein for an unbraked vehicle, the wheel sensor which indicates the second-lowest wheel speed is selected. (Col 8 lines 40-45)

In reference to claim 5, Ohtsu provides a brake system wherein one sensor for each wheel or group of wheels is initially selected using a first speed criterion (deceleration); and one of the initially selected sensors is finally selected, using a second speed criterion (i.e. highest sensor speed) sensor, and used to determine the reference speed. Col 8 lines 18-65.

In reference to claim 6, Ohtsu provides a brake system characterized in that the first and the second speed criterion are in each case an extreme-value criterion.

In reference to claims 7 and 15, Ohtsu provides a brake system wherein for a braked vehicle, the wheel sensor with the minimal wheel speed is initially selected from the respectively at least two wheel sensors; and the initially selected sensor having the maximal speed is finally selected. Ohtsu is capable of selecting either sensor based on certain criteria. Col 8 lines 18-65.

In reference to claims 8 and 16, Ohtsu provides a brake system wherein for an unbraked vehicle, the wheel sensor with the maximal wheel speed is initially selected from the respectively at least two wheel sensors; and the initially selected sensor having

the minimal speed is finally selected. Ohtsu is capable of selecting either sensor based on certain criteria. Col 8 lines 18-65.

In reference to claim 9, Ohtsu provides a brake system wherein the electronic unit is an ABS/ASR control unit.

In reference to claim 11, Ohtsu provides a brake system wherein for an ABS control intervention of the brake pressure control of a wheel or of a wheel group, a lower speed of the speeds supplied by the at least two assigned wheel sensors is used as a basis when a protection against a locking of the wheel or of the wheel group has the highest priority.

In reference to claim 12, Ohtsu provides a brake system wherein for an ASR control intervention of the brake pressure control of a wheel or of a wheel group, a lower speed of the speeds supplied by the at least two assigned wheel sensors is used as a basis when a protection against an erroneous reduction of the traction force at the wheel or the wheel group has the highest priority.

In reference to claim 13, Ohtsu provides a brake system wherein for an ASR control intervention of the brake pressure control of a wheel or of a wheel group, a higher speed of the speeds supplied by the at least two assigned wheel sensors is used as a basis when a protection against a spinning of a wheel or of the wheel group has the highest priority.

6) Claims 1 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Mueller (6112146).

In reference to claim 1, Mueller provides a vehicle brake system comprising: at least two wheel speed sensors (102) for each wheel group whose speed is to be measured; an electronic unit (10) for analyzing signals from the wheel sensors to instantaneously select the signals from one of the wheel sensors and determining a reference speed approximating the actual vehicle speed using the selected signals; and the electronic unit selecting the one wheel sensor as a function of the actual driving condition and at least one defined speed criterion. Please note that a wheel group can be all four wheels or the wheels on the front or rear of the vehicle.

In reference to claim 14, provides a brake system including a plausibility checking device which subjects the signals supplied by the wheel speed sensors to a plausibility check; and wherein the electronic unit does not consider sensors which supply signals do not pass the plausibility check. (col 7 lines 60-70)

Response to Arguments

7) Applicant's arguments filed January 17, 2004 have been fully considered but they are not persuasive. After further consideration of applicant's amendment and the art of record, it is believed that the claims still read on the art of record. Since applicant states in the alternative, "at least two wheel speed sensors assigned to measure a speed of each wheel or a single common speed of each wheel group." Please note that the examiner has read the claim as, "at least two wheel speed sensors assigned to measure a speed of a single common wheel group." It is recommended that applicant

amend the claims to recite, --at least two wheel speed sensors assigned to each wheel, the sensors either measuring a speed of each wheel or a single common speed of each wheel group.—The references cited have only one speed sensor assigned to each wheel.

Conclusion

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DK

Devon Kramer
6-21-04